

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

The specification has been amended on pages 2, 4, 9, 10, 12, and 14.

New claims 16-22 have been added.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier. Claims 1-22 are currently pending.

Objection to the Drawings

The drawings are objected to for containing a reference character, Vs, which is not discussed in the specification. This objection is respectfully traversed. Applicants submit that the reference character Vs is discussed in the specification. For example, Vs is discussed in the specification on page 13, line 23. Withdrawal of this objection is respectfully requested.

Rejection Under 35 U.S.C. § 102

Claims 1, 14, and 15 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Pub. No. 2002/0032515 (hereafter "Nakamura et al."). This rejection is respectfully traversed.

Claim 1 recites a vehicle external recognition system that includes a relative position detecting section detecting an object ahead of a vehicle as a detected object to detect a relative position relationship between the detected object and the vehicle; a relative velocity calculating section calculating a relative velocity between the detected object and the vehicle based on the relative position relationship detected by the relative position detecting section by using an initial value that is preset; a vehicle velocity detecting section detecting a velocity of the vehicle; and a motion attribute discriminating section discriminating a motion attribute, indicative of a motion state of the detected object, based on the relative velocity calculated by

the relative velocity calculating section and the velocity detected by the vehicle velocity detecting section. Claims 14-16 and 20 contain similar language.

Nakamura et al. discloses a vehicle control method that uses a discrimination ability to recognize a forward object as a stationary vehicle, road sign, overhead bridge, or other object. See Nakamura et al. at paragraphs 0014, 0015, 0020, 0028, and 0118-0134. However, the discrimination ability of Nakamura et al. is used to determine what type of object is in front of a host vehicle via image processing, not to discriminate a motion attribute of an object. Therefore, Nakamura et al. fails to disclose “a motion attribute discriminating section discriminating a motion attribute, indicative of a motion state of the detected object,” as recited in claim 1. Nor does Nakamura et al. disclose “a motion attribute discriminating section discriminating a motion state of the detected object,” as recited in new claim 16.

Nakamura et al. discloses that a relative velocity of a preceding vehicle is measured by using millimeter wave radar and conventional methods. See Nakamura et al. at paragraph 0050. However, Nakamura et al. fails to disclose “a relative velocity calculating section calculating a relative velocity between the detected object and the vehicle based on the relative position relationship detected by the relative position detecting section by using an initial value that is preset” because Nakamura et al. does not disclose a step or device that determines a relative velocity in this way.

For at least these reasons, Nakamura et al. fails to disclose all of the features of claims 1, 14, and 15, as well as new claims 16-22. Withdrawal of this rejection is respectfully requested.

Rejection Under 35 U.S.C. § 103

Claims 2 and 4-9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakamura et al. in view of U.S. Patent No. 6,750,805 (hereafter “Cameron”). This rejection is respectfully traversed.

Cameron discloses an automatic target detection algorithm. See Cameron at col. 1, lines 14-16, and col. 2, lines 25-35. However, Cameron fails to remedy the deficiencies of Nakamura et al. because Cameron does not disclose or suggest the motion attribute discriminating section or step of claims 1, 14-16, and 20. Nor does Cameron disclose or

suggest the relative velocity calculating section or step of claims 1, 14-16, and 20. Therefore, any combination of Nakamura et al. and Cameron fails to disclose all of the features of claims 1, 14-16, and 20. Withdrawal of this rejection is respectfully requested.

Allowable Subject Matter

Applicants wish to thank the Office for indicating that claims 3 and 10-13 contain allowable subject matter.

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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By 

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